WE CLAIM:

1. A receiver comprising:

a receiver which receives a broadcast signal;

a detector which tunes a channel that is receivable by the receiver and judges whether a broadcast signal is included in the channel or not;

a memory which stores information of existence of a broadcast signal in the tuned channel based on the judgment by the detector; and

a channel setupper which carries out channel setup operation in which the detector scans a plurality of channels in the broadcast frequency band, and the detector and the memory are controlled to thereby store existence information of a plurality of channel broadcast signals in the broadcast frequency band in the memory;

wherein the channel setupper skips channels having broadcast signals the existence of which is stored in the memory during scanning in the channel setup operation.

2. The receiver as claimed in claim 1, comprising a channel up-down tuner which tunes selectively channels having broadcast signals the existence of which is stored in the memory when the channel is up-down tuned successively.

3. The receiver as claimed in claim 1, wherein existence of a broadcast signal is judged based on detection of a horizontal sync signal included in an image signal if the broadcast signal

is an analogue broadcast signal.

4. The receiver as claimed in claim 1, wherein existence of a broadcast signal is judged based on acquisition of program information data included in the digital broadcast signal if the broadcast signal is a digital broadcast signal.

5. The receiver as claimed in claim 1, wherein the channel setupper stores the number of channel setup operation.

6. The receiver as claimed in claim 5, wherein the channel setupper carries out automatically channel setup operation periodically with a predetermined cycle time if the stored number of channel setup operation is 1 or larger.

7. The receiver as claimed in claim 1, wherein the memory stores a channel map that specifies the number of physical channels and logical channels in which a broadcast signal exists if the broadcast signal is the digital broadcast signal.

8. The receiver as claimed in claim 1, comprising a standby system that brings the receiver in standby state for energy saving when a power source is turned off, and wherein the channel setup operation is carried out during the standby state.

9. The receiver as claimed in claim 5, comprising an initializer to initialize the number of channel setup operation stored in the memory.

10. The receiver as claimed in claim 5, wherein the detector judges with variable accuracy based on the number of channel setup operation.

11. The receiver as claimed in claim 10, wherein the variable accuracy of the detector varies depending on the time that is required to detect a horizontal sync signal included in an image signal for the analogue broadcast.

12. The receiver as claimed in claim 10, wherein the variable accuracy of the detector varies depending on the time that is required to analyze broadcast program information data for the digital broadcast.

13. The receiver as claimed in claim 1, comprising a current registered channel detector which judges whether a broadcast signal is included or not in channels having broadcast signals the existence of which is stored in the memory, and wherein when the current registered channel detector judges that the broadcast signal is not included in the channels, the existence information of the broadcast signal in the channels stored in the memory is varied.

14. The receiver as claimed in claim 13, wherein the current registered channel detector judges that a broadcast signal does not exist in the channels if the broadcast signal is not received repeatedly a plurality of times.

15. The receiver as claimed in claim 7, comprising: an OSD which synthesizes the channel map information stored in the memory into a display signal; and a display which displays the display signal synthesized by the OSD.

16. A channel setup method for setting up channels to

be tuned in channel up-down tuning comprising:

a step of receiving a broadcast signal;

a first channel setup step in which a plurality of channels are scanned continuously, and the information of the channel is stored if the scanned channels include a broadcast signal; and

a second channel setup step in which a plurality of channels are scanned with skipping channels stored based on the fact that the channels include the broadcast signal in the first channel setup step, and the information of the channel is stored if the scanned channels include a broadcast signal.

17. A channel setup method as claimed in claim 16, wherein the channels scanned in the first channel setup step cover all the channels having frequencies included in the broadcast frequency band.

18. A channel setup method as claimed in claim 16, comprising:

a channel map forming step of forming a channel map that indicates existence of the broadcast signal of the plural channels based on the information stored in the first and second channel setup steps, and

a display step of displaying the channel map formed in the channel map forming step.